# TECHNICAL LETTER—CHEMICAL COMPATIBILITY

Chemical Compatibility with Other Building Materials and Sealants with Protecto Wrap's Self-adhered Membranes, Building Tapes, Energy Saving Products, Liquid Membranes and Pipeline Products.

Protecto Wrap Company offers different self-adhered products and liquid-applied membranes for a variety of needs.

The designer will often question the chemical compatibility of self-adhered products with other materials during the design of an assembly, or perhaps later in the field. Protecto Wrap self-adhered products are designed to be chemically compatible with most substances and products that are normally present in modern construction.

Protecto Wrap self-adhered products utilize a high-density polymer facing material, synthetic fabric reinforcement, an aluminum reinforced polymer facing material, a foam surface or a wicking surface. Almost always, there is no chemical compatibility issue if a material contacts any of these surfaces. If, on the other hand, the contact area is on the adhesive side of the flashing, then more information will be needed.

Protecto Wrap Company manufactures products with a variety of adhesives. The adhesive side of our products can come into contact with several different materials on the same jobsite. The chemical compatibility of dissimilar materials can cause reactions that affect the performance of the self-adhered membranes and/or the degradation of the materials they contact.

Protecto Wrap Company also manufactures products which utilize an adhesive on both sides of the membrane. These products are covered by a release liner that is removed after installation that exposes the adhesive. The products are: Jiffy Seal 140/60, Jiffy Seal Ice & Water Guard, JS500 Detail Tape, AFM 500 Detail Tape, PSDS Detail Tape and Protecto Roof Edge Seal.

The following guidelines are to help in the selection of materials that can be used and to identify products that should not be used.

#### **Building Materials**

Protecto Wrap self-adhered products are often applied directly to and are compatible with exterior sheathing such as plywood, fire-treated plywood, oriented strand board (OSB), exterior gypsum board, glass mat surfaced gypsum board (Densdeck™/DensGlass Gold®), concrete, and extruded polystyrene. Protecto Wrap self-adhered products are compatible with chromated copper arsenate (CCA), alkaline copper quaternary (ACQ), ammoniacal copper zinc arsenate (ACZA), pressure-treated woods and pressure-treated plywoods.

Protecto Wrap Company recommends on-site testing for adhesion prior to final application of self-adhered membranes. If adhesion to the tested substrate is marginal, a primer should be used to achieve adequate adhesion. Please reference our **Library & Resources – Primer Recommendations** to help in selection of a primer suitable for the application.

#### **Windows & Doors**

Protecto Wrap Company flashing products generally come in contact with the nailing flange or frame components of windows and doors. In general our flashing products are compatible with most vinyl and wood window and door components; however, some manufacturers use highly plasticized PVC in the formulation of the nail flange material that can have a reaction when in contact with Rubberized Asphalt

adhesives. Please consult your window or door manufacturer for information regarding the composition of their nailing flange components if there is any concern.

**Protecto Wrap Rubberized Asphalt Adhesive** based products are compatible with virgin vinyl and rigid polyvinyl chloride (PVC), but not highly plasticized polyvinyl chloride.

**Protecto Wrap Butyl Adhesive** based products are 100% butyl rubber adhesive. The butyl adhesive in these products is compatible with virgin vinyl, rigid polyvinyl chloride (PVC), highly plasticized polyvinyl chloride, and thermoplastic polyolefin (TPO).

**Protecto Wrap Block Copolymer Adhesive** based products are compatible with virgin vinyl and rigid polyvinyl chloride (PVC).

**Protecto Wrap Water Based LWM 200** a fluid applied material whose primary ingredient is latex is compatible with virgin vinyl, rigid polyvinyl chloride (PVC), and highly plasticized polyvinyl chloride.

Warning: Some arched and round shaped windows may use a highly plasticized flexible PVC nailing flange. It is always best to contact the window manufacturer to determine if the nailing flange is constructed of highly plasticized PVC.

#### **Weather Resistive Barriers**

Protecto Wrap self-adhered flashing products are compatible with the following weather resistive barriers:

- Perforated woven Polyolefin (DriShield)
- Non-Perforated Polymer based (DriShield II)
- Polyurethane Coatings
- Spun-Bonded Polyethylene
- High Density Polyethylene Sheet (Vortec)/Visqueen
- Red Rosin Paper
- Asphaltic Dampproofing
- Asphalt Saturated Felt
- Protecto Wrap Fluid Applied Air Barrier System (LWM200)

#### Metals

Protecto Wrap products are compatible with most metals; however some metal surfaces may have a protective coating that will not allow optimum adhesion.

- Metal surfaces may need to be solvent wiped, abraded, and primed to achieve optimum adhesion.
- Proper safety measures must be followed when using solvents to clean metal.

#### **Sealant and Caulking Materials**

Most sealants are chemically compatible with Protecto Wrap self-adhered products provided that the sealant is applied to the high-density polyethylene film component of the flashings.

The following sealants in general and when fully cured are chemically compatible with the adhesive side of all Protecto Wrap self-adhered products if the specific formulation does not contain hydrocarbon solvents:

- Silicone
- Acrylic
- Butyl
- 1-Part Polyurethane
- 2-Part Polyurethane Remove or strike down any excess sealant prior to installing self-adhered products.

### **Protecto Wrap Liquid Membranes**

Protecto Wrap latex based membranes, CMU100 and LWM200, are compatible with most substrates.

# **Non-Compatible Materials**

Protecto Wrap self-adhered membranes are not compatible with the following substances:

- Creosote
- Hydrocarbon Solvents
- Pentachlorophenol
- Diesel Fuel
- Uncured Neoprene
- Gasoline/Oil
- Polysulfides
- High concentrations of pitch (resin from soft wood)
- FPDM<sup>3</sup>
- Highly Plasticized PVC\*
- Coal Tar
- \* Protecto Wrap Butyl Adhesive and Block Copolymer products are compatible with highly plasticized PVC window flanges and EPDM.

The following is a list of Protecto Wrap products and their adhesives:

	Membrane & Tape Adhesives	SBS Modified		Block	Water
Category	Product Name	Asphalt	Butyl	Copolymer	Based
Building & Flashing Tapes	BT20XL		<u>√</u>		
Dulliang & Hashing Tapes	BT25XL	✓			
	Form Flash 1	✓			
	Form Flash 2 EPDM		✓		
	Primer Free Stucco Tape			✓	
	Proteco Flex	✓			
	PS 45 Aluminum	✓	✓		
	PSDS Detail Tape	✓			
	Sill Pan Flash	✓	✓		
	Stucco Tape	✓			
	Super Stick			✓	
	Super Stick Deck Joist Tape			✓	
En aura Dua du eta	Pural Curand	<b>✓</b>		111111111111111111111111111111111111111	
Energy Products	Dual Guard	<b>√</b>			
	Energy Plate Liner	<b>▼</b>			
	Premium Energy Sill Sealer	· ·		<b>/</b>	
	Triple Guard Energy & Insect Sill Sealer	•		•	
Roofing Underlayments	Form Flash 2 EPDM		✓		
	Ice & Water Guard	✓			
	Jiffy Seal Ice & Water Guard HT	✓			
	Jiffy Seal Ice & Water Guard HT 25	✓			
	Jiffy Seal Ice & Water Guard Butyl HT		✓		
	Jiffy Seal Ice & Water Guard Extreme			✓	
	Rainproof 40 & 60	✓			
	Roof Deck Seam Tape	✓			
	Roof Deck Seam Tape- Extreme			✓	
	Roof Edge Seal	✓			
	Tile Flash 30XL & 60XL	✓			
A'- C Vous Book of The Well Starting	DW 400/40	<b>✓</b>			
Air & Vapor Barier & Thru Wall Flashing	PW 100/40			<b>✓</b>	
	Universal Primer Free Membrane			·	
Waterproofing- Membrane	Jiffy Seal 140/60	<b>√</b>			
	PW 100/60	✓			
	JS 500 Detail Tape	✓			
	Protecto Deck	✓			
	Universal Primer Free Membrane			✓	
Waterproofing- Liquid	CMU100 & LWM200				✓
Other	SafSeal 6626/60 Foil Tape		<b>√</b>		
	SafeSeal 6610 SeamSeal Tape		<b>✓</b>		
	Saf Seal 6634 A&VB TWF		✓		
	Bridge Deck M400A & M400A(R)	<b>√</b>			
Flooring Underlayments	AFM and AFM-WM	✓			
	Protecto Deck	✓			
	Whisper Mat CS	✓			
	Whisper Mat HW	✓			
	Whisper Mat LVT	✓			
Pipeline Products	Pipe Tape-200-35	<b>✓</b>			
	Pipe Tape-320-35 Butyl				
	Pipe Tape-350-35 Butyl		<b>✓</b>		
	Pipe Tape-360-35 Butyl		<b>√</b>		
	GT-50 Pipe Wrap	<b>✓</b>			
	Insul-Seal Pipeline			<b>✓</b>	
	Protecto Seal 50	<b>✓</b>			
	Protecto Seal 50 Butyl		✓		

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